latter observers called attention to the fact that the presence of the reaction does not lessen the importance of making an accurate diagnosis of the patient's condition as a whole, illustrating this by the history of a patient who might have been thought to have a relapse, but proved to have a meningitis following the typhoid attack.—*British Medical Journal*, December 18, 1897.

Hæmatoporphyrinuria, with the Report of a Case.—OGDEN (*Boston Medical and Surgical Journal*, February 24, 1898, p. 169) gives a concise historical review of the subject of hæmatoporphyrinuria, and reports a personal observation.

Hæmatoporphyrin is a rare constituent of the urine, and is a coloring matter derived from the blood. The first observations on the subject were made by Hoppe-Seyler in 1871, when he found that hæmatin heated with sulphuric acid yielded a compound whose acid and alkaline solutions showed spectral bands unlike any substance he had seen before. To this new compound he gave the name "hæmatoporphyrin." Nencki and Sieler determined its exact formula to be $C_{16}H_{18}N_2O_3$, and the former demonstrated that the only chemical difference between hæmatin and hæmatoporphyrin was that the latter was simply hæmatin free from iron.

In 1880 MacMunn described a pigment which he obtained from the urine of a case of acute rheumatism, and which he called "urohematin." In 1883 he reported other cases of acute rheumatism in which this pigment occurred, and from the similarity of its spectrum to that of hæmatoporphyrin he named the pigment "urohæmatoporphyrin."

Hæmatoporphyrin has been found in the urine in pulmonary tuberculosis, in pleurisy with effusion, acute rheumatism, lead-poisoning, and intestinal hemorrhages. The pigment has been found probably most frequently in the urine of patients to whom sulphonal had been administered. In fact, it seems to occur almost constantly when the drug has been given in considerable quantities, but never when only a single dose (one gramme) has been taken. It has also been found in the urine after the administration of trional and tetronal.

Stokvis has found that it occurs after intestinal hemorrhage. In artificial hæmatoporphyrinuria produced in rabbits by the administration of sulphonal, he found that minute hemorrhages into the mucous membrane of the stomach and intestines occurred. From these areas he extracted hæmatoporphyrin, and he believes that in these cases the blood which had entered the digestive tract was changed into hæmatoporphyrinuria, absorbed, and excreted in the urine.

Ogden's case occurred in a woman, aged thirty-eight years, who had suffered from rheumatism for years, and who had a mitral heart lesion. The patient previous to the appearance of the hæmatoporphyrinuria had had diphtheria. During convalescence she began to have vomiting and diarrhœa, and later pains and loss of sensation in the legs and body up to the waist line. Urine and feces were passed involuntarily. On two different occasions trional in fifteen-grain doses was given for insomnia. It was after the administration of this drug that the dark, pigmented urine containing hæmatoporphyrin was voided, and Ogden believes that the drug was responsible for its occurrence, although he admits the possibility of the disease of the nervous system and the gastro-intestinal disturbance being the causes.

Chronic Diphtheria.—C. MEYER, in a valuable report on the modification of diphtheria during treatment with antitoxin, records two interesting cases (*Deutsches Archiv für klin. Med.*, Bd. lix. p. 465). The first, a boy two years old, was ill a week before admission. Two days before the latter there was hoarseness, and one day dyspnœa and epigastric retraction. One thousand antitoxin units were injected. On admission there was an extensive grayish-white membrane in the pharynx; the submaxillary lymph glands were enlarged; there were cyanosis, laryngeal stridor, hoarseness, and frequent cough; pulse and respiration accelerated; temperature normal. There was also bronchitis, but no pneumonia. The membrane gave an almost pure culture of diphtheria bacilli. A second injection of 1000 units was made at once, and a third the next day but one. After that the stridor disappeared, but, as the respirations were more frequent, cough worse, and temperature higher, another injection was made. This was followed by a macular eruption. Respiration was still frequent; there were moist râles and cyanosis. Four days later the temperature was 102.5°, and, on account of the progressing disease in the bronchi, another injection was made, followed again by a partly hemorrhagic, partly macular eruption, and a diffuse œdema of the arms and legs. The fever continued another week, when desquamation occurred in large scales. Twenty-five days after admission tracheotomy was performed on account of the marked stridor and the weak respiration over both lungs. Pus from the trachea contained diphtheria bacilli in almost pure culture. A week later the patient died. Autopsy disclosed diphtheritic and streptococcus infections of the lung, in small foci, necrotic in the centres. The author considers the long duration of the disease as an evidence of the specific action of the antitoxin. The passive immunity served to prolong life, but notwithstanding, or, perhaps, because of it, the body could not furnish active immunity for definite recovery. Perhaps also the incidental effects of the remedy in weakening the body contributed to the fatal end, though not the chief cause of death. In the second case, a three-year-old girl had laryngeal stenosis and left-sided pneumonia. Cultures showed diphtheria bacilli. During the first six days two injections of 1500 units each of Behring's serum, and one of 1000 units, were made. Dyspnœa growing worse, tracheotomy was performed. On the following day an eruption appeared, with high fever, lasting nine days. The canula was then removed; the pulmonary symptoms improved, but fever continued. Membranes were twice expelled. For more than a month bronchitis continued. Frequent cultures always contained Loeffler's bacillus. Three months after the beginning tracheotomy was again necessary, and was followed by bronchitis and pneumonia. An injection of 1000 units was followed by an urticarial rash. Cough and hoarseness were noted occasionally after this at intervals. The bacilli were found in the secretions up to a year and a half after the primary attack, the pharynx showing no abnormality.

Scarlet Fever.—C. SEITZ publishes some interesting data and conclusions, based on observations extending over ten years (*Münch. med. Wochenschrift*,